

nih record



ABOVE • What does NIH stand for? These two scientist-songbirds say, *Nerds in Harmony*, of course. See story on p. 12.

features

Multiple Events Will Mark 10-Year Anniversary of Human Genome

1

NIH Adopts New Logo

3

Initiatives on Big Data, Diversity Get Acting Leadership

7

Singing Group Offers Outlet for Young Scientists

12

departments

Briefs	2
Volunteers	5
Milestones	9
Digest	11

NHGRI Celebrates 10th Anniversary of Human Genome Project Completion

By Raymond MacDougall

Ten years after completion of the Human Genome Project (HGP), researchers from around the world are still making countless discoveries about the human genome. But much more remains to be learned about life's operating system in order for genomics to be used productively to improve human health.

The National Human Genome Research Institute, which spearheaded the HGP, plans a series of seminars, a symposium and an interactive exhibition to mark the 10-year anniversary of the project's completion and to reflect on the HGP's revolutionary influence on biomedicine.

"The Human Genome Project has had a remarkable impact on science over the past decade," said NHGRI

SEE **GENOME ANNIVERSARY**, PAGE 4

Summit Calls for Accelerated Pace Towards Health Equity

Low and melodious, the baritone's voice commanded an otherwise silent ballroom. "I've been in the storm so long—oh, give me a little time to pray. Oh, let me tell my mother how I come along," sang Etienne Lashley, a Howard University student, offering a favorite song of former U.S. Rep. Louis Stokes (D-OH), as thousands paid tribute during the opening ceremony of the 2012 Science of Eliminating Health Disparities Summit held recently at Gaylord National Resort and Convention Center.

In the company of Stokes, his family, friends and colleagues, NIH director Dr. Francis Collins honored Stokes by unveiling a 45 x 54-inch portrait of him that will be displayed in the Louis Stokes Laboratories on campus.

The summit boasted hundreds of speakers, unprecedented



Former Rep. Louis Stokes



NHGRI plans several events to mark the 10-year anniversary of completion of the Human Genome Project.

Flu Shot Program Wraps Up for Season

By Carla Garnett

"Foil the Flu," NIH's annual Flu Vaccination Program, issued its last call for the season via email on Jan. 14. The program, which offers free flu shots for the NIH community, ran from Sept. 10, 2012, to Jan. 16.

The Clinical Center purchased about 15,000 doses of the flu vaccine for the 2012-2013 season. As of Jan. 16, the Occupational Medical Service exhausted its supply of vaccine intended for anyone under age 65. OMS still has vaccine designed for individuals who are 65 or older. What few doses of the standard vaccine that remain are reserved for patients.

This season, OMS administered 13,532 doses of the vaccine. That's approximately a 9 percent increase over the number of doses OMS administered last season (12,371) and a 21 percent increase over the number OMS provided 2 years ago (11,202).

OMS in the Office of Research Services and the Clinical Center's Hospital Epidemiology Service sponsor the influenza immunization program.

SEE **FLU SHOTS**, PAGE 8



The NIH Record is recyclable as office white paper.



The NIH Record is published biweekly at Bethesda, MD by the Editorial Operations Branch, Office of Communications and Public Liaison, for the information of employees of the National Institutes of Health, Department of Health and Human Services. The content is reprintable without permission. Pictures may be available upon request. Use of funds for printing this periodical has been approved by the director of the Office of Management and Budget through September 30, 2013.

To receive alerts to our latest issue, send an email to listserv@list.nih.gov with the words "Subscribe NIHRECORD" in the message body.

NIH Record Office Bldg. 31, Rm. 5B41
Phone (301) 496-2125 Fax (301) 402-1485

Web address <http://nihrecord.od.nih.gov>

Editor
Richard McManus
Rich.McManus@nih.gov

Associate Editor
Carla Garnett
Carla.Garnett@nih.gov

Staff Writers
Jan Ehrman
Jan.Ehrman@nih.gov

Belle Waring
Belle.Waring@nih.gov

The NIH Record reserves the right to make corrections, changes or deletions in submitted copy in conformity with the policies of the paper and HHS.

NIH...Turning Discovery Into Health

nih record

briefs

Author Goleman To Present at DDM Seminar

The Deputy Director for Management (DDM) announces the second seminar of the 2012-2013 series "Management and Science: Partnering for Excellence." The event on Thursday, Feb. 14 from 11 a.m. to 12:30 p.m. in Masur Auditorium, Bldg. 10, will feature Dr. Daniel Goleman, author of *Emotional Intelligence* and *Social Intelligence*. Goleman examines the concepts of emotional intelligence in the workplace, outlining its importance in achieving success.

Videocasting and sign language will be provided. Individuals who need reasonable accommodation to attend should call (301) 496-6211 or the Federal Relay Service at 1-800-877-8339.

For more information about the series, visit www.ddmseries.od.nih.gov or call (301) 496-3271.

Google, Bing Offer Research Tips for Researchers, Feb. 6 in Masur

Learn expert web-searching tips directly from Google and Bing. The NIH Library presents Daniel Russell and Duane Forrester on Wednesday, Feb. 6 from 10 a.m. to noon in Masur Auditorium, Bldg. 10.

Russell, from Google, will demonstrate different methods and techniques for finding things you didn't think could be found and some of the strategies you can use for online investigations in the years ahead. Often called a search anthropologist, he has spent most of his career understanding how people use the tools of technology to amplify their intelligence. Prior to joining Google, he worked for IBM, Xerox and Apple in the area of user experience. Russell maintains a blog, SearchReSearch, that focuses on topics related to search.

Forrester, from Bing, will discuss deep search and specific tips and tricks you can use to narrow search results and uncover exactly what you seek. He is a senior product manager with Bing's webmaster program. He is the author of two books: *How to Make Money with Your Blog* and *Turn Clicks into Customers*. Forrester maintains his own blog, theonlinemarketingguy.com.

No registration is required for the seminar. Overflow seating will be available in the NIH Library training room located on the first floor of Bldg. 10. The event will be videocast and archived. The seminar will be followed by light refreshments in the NIH Library reading room.

The program is part of the NIH Library's Training Program on new and existing research tools and is open to all NIH and HHS staff.

New Program Directors at NIGMS

NIGMS recently added two new program directors to its scientific staff.

Dr. Tanya Hoodbhoy joins the Division of Genetics and Developmental Biology, where she oversees research grants in the area of developmental genetics. She was formerly a program director in the Office of Strategic Coordination of the NIH Division of Program Coordination, Planning and



Strategic Initiatives. Prior to that, Hoodbhoy was a scientific review officer for the biology of development and aging integrated review group at CSR.

She earned a bachelor's degree in biology from Occidental College and a Ph.D. in biology from the University of California, Riverside. Hoodbhoy conducted postdoctoral research on the molecular mechanisms underlying mammalian fertilization and early development at the University of California, Riverside, and NIDDK.



New NIGMS program directors Dr. Tanya Hoodbhoy (top) and Dr. Robin Broughton

Dr. Robin Broughton joins the Division of Training, Workforce Development, and Diversity. She administers the Research Initiative for Scientific Enhancement, a development program for students from underrepresented

groups. Before joining NIGMS, Broughton was an AAAS science and technology policy fellow at NCI, where she served as a project manager in the Office of Cancer Genomics. Prior to that, she was an assistant professor in the department of microbiology and immunology at Meharry Medical College.

Broughton earned a bachelor's degree in microbiology from North Carolina State University and a Ph.D. in microbiology and immunology from Wake Forest University. She conducted postdoctoral research on the role of cellular membrane proteins in HIV budding patterns at John Hopkins University and the University of North Carolina at Chapel Hill.



National Institutes of Health

Communication Effort Emphasizes NIH Identity

What's that new symbol on the home page? The new NIH logo. The logo was developed over the past year as part of a larger effort to strengthen the impact of NIH communications. It responds to a growing clamor among NIH constituents—from members of Congress and from NIH's own leadership—that the agency needs to communicate with maximum impact the value of investing in biomedical research.

"Now, more than ever, it's time to make the strongest case possible that NIH has a profound, positive influence on people's lives every day," said John Burklow, NIH associate director for communications and public liaison. "We also need to make it as easy as possible for the public to understand the full scope of NIH's work. We need to start by becoming less fragmented and more focused in our communications."

The logo was formally adopted by the institute and center directors and NIH leadership last November after much consultation internally and externally. They decided it was best to go with a clean, "mobile device-friendly" design that features the letters "NIH," consistent with a growing trend in logo design.

They also agreed that it will be the only "visual mark" to be used across the agency to reduce confusion for the public. The institutes, centers, offices and programs will be identified by text added in the space after or under the arrow.

For the historians among us, the new logo appeared officially on the home page on Nov. 29, 2012, as only the fourth mark to be used by NIH in its history. Use of the new logo is being phased in gradually and in a cost-conscious way.

In addition to the new, consistent visual identity, NIH is stepping up its efforts to work with grantees to make clear that their work is made possible through support from NIH. Some 84 percent of NIH funding goes outside the agency to thousands of institutions around the country. This is sometimes, surprisingly, a little-known fact outside the Bethesda campus.

Also, there will soon be a "toolkit" available to institutes and centers. It will contain resources to communicate about NIH, including detailed visual identity guidelines, PowerPoint slides, talking points and best practices for engaging grantees, patient and voluntary organizations, professional societies and the interested public.

Requests to use the new logo should be sent to logo@mail.nih.gov.



Children's Inn CEO Russell a 'Washingtonian of the Year'

Kathy L. Russell, chief executive officer of the Children's Inn at NIH, was named one of 10 Washingtonians of the Year for 2012 in the January issue of *Washingtonian* magazine. She was cited for her lifelong commitment to "creating a haven for kids battling illness."

Russell was a founding member of the inn in 1990. She also helped launch Special Love, a nonprofit that runs Camp Fantastic, a summer program for kids with cancer.

Dr. Philip Pizzo, the inn's first medical director when he was chief of the Pediatric Oncology Branch at the National Cancer Institute, was quoted in the *Washingtonian*: "It's because of Kathy Russell that thousands of children and families have been supported through the perilous journey of catastrophic disease. In a nation that sometimes struggles to find true heroes, Kathy stands out for her integrity, love for others and devotion to making Washington and the world a better place."

The story is online at www.washingtonian.com/articles/people/washingtonians-of-the-year-2012-kathy-russell/.

Protocol Navigation Lecture, Feb. 4 in Lipsett

The second lecture in the 2013 IRP Protocol Navigation Training Program Seminar Series will be held Monday, Feb. 4 from 10 to 11 a.m. in Bldg. 10, Lipsett Amphitheater. The program is a trans-NIH effort to develop resources and tools and to provide training for intramural staff and contractors involved in protocol development, writing, coordination and management. Katherine Cooper-Arnold and Donna Jones from the NHLBI Office of Clinical Research will present "Certificates of Confidentiality: What Are They, How Are They Used and When Should You Have One?" For more information, contact Beverly Barham, (301) 594-2494, bbarham@mail.nih.gov or Marcia Vital, (301) 451-9437, vitalm@mail.nih.gov.



GENOME ANNIVERSARY

CONTINUED FROM PAGE 1

Above, from 1:

*In three 2-hour seminars, pairs of speakers will focus on a current theme in genomics. The first paired talk, *Conceptualization of the Human Genome Project and Development of Data Release Principles*, features Dr. Robert Waterston of the University of Washington School of Medicine and Nobel laureate Sir John Sulston of the University of Manchester.*

*The second paired lecture, *Genomic Data Privacy and Risk*, includes Dr. Isaac Kohane of Boston Children's Hospital and Dr. George Church of Harvard Medical School.*

director Dr. Eric Green. "I am pleased that NHGRI has put together a varied set of events to showcase the many ways that genomics is now advancing biomedical research."

The celebration kicks off with a seminar series that starts this month, followed by a day-long symposium in April and the opening of an exhibition at the Smithsonian Institution's National Museum of Natural History in June.

Seminar Series

Six prominent biomedical researchers, including one Nobel laureate, will participate in a commemorative seminar series. In three 2-hour seminars—scheduled in February, March and May—pairs of speakers will focus on a key theme in genomics at Lipsett Amphitheater in Bldg. 10.

The first set of paired lectures, *Conceptualization of the Human Genome Project and Development of Data Release Principles*, features Dr. Robert Waterston and Nobel laureate Sir John Sulston. It will take place on Feb. 14 from 9 to 11 a.m.

Waterston is professor and chair of the department of genome sciences at the University of Washington School of Medicine. Sulston is chair of the Institute for Science, Ethics and Innovation at the University of Manchester in the United Kingdom. The two collaborated during the HGP on sequencing both the genome of the nematode worm, *Caenorhabditis elegans*, and the human genome. The worm genome sequence, published in 1998, was the first sequenced animal genome; the project demonstrated the feasibility of moving on to sequence the human genome.

The second set of paired lectures, *Genomic Data Privacy and Risk*, will be held on Mar. 21 from 11 a.m. to 1 p.m. One speaker will be Dr. Isaac Kohane, chair of the informatics program at Boston Children's Hospital. He is a pediatrician

and a genetic epidemiologist who has implemented computer-based biomedical decision-support systems and has developed systems to protect the privacy of health information and automated personal health records. He will be joined by Dr. George Church, professor of genetics at Harvard Medical School. For many years, Church has developed and advanced methods for sequencing genomes. He is also a leading voice in discussions about research interests and the privacy and protection of genomic information. He directs the Personal Genome Project, a study that is sequencing the genomes of thousands of volunteers and exploring the privacy risks for participants.

The final set of paired lectures, *Translating Pharmacogenetics Research to Practice: The Case Example of Smoking Cessation*, is scheduled for May 6 from 9 to 11 a.m. The two speakers will be Dr. Caryn Lerman, professor of psychology in psychiatry at the University of Pennsylvania's Perelman School of Medicine, and Dr. Alexandra Shields, director of the Harvard/Massachusetts General Hospital Center on Genomics, Vulnerable Populations and Health Disparities.

Lerman studies the genetics of nicotine's stimulant effect. Shields is a health policy expert who focuses on the challenges of clinical integration of genomics into clinical practice, particularly the impact of these challenges on minority and underserved populations. Both speakers will address the problems of nicotine addiction and the role that the drug plays in how individuals meet the challenge to stop smoking.

Commemorative Symposium

A commemorative all-day symposium, planned for Apr. 25 in Kirschstein Auditorium, Natcher Conference Center, will feature a group of speakers. The event, *The Genomics Landscape a Decade after the Human Genome Project*, will look at the accomplishments of the decade with



The final paired lecture will feature Dr. Caryn Lerman (l) of the University of Pennsylvania's Perelman School of Medicine and Dr. Alexandra Shields of the Harvard/Massachusetts General Hospital Center on Genomics, Vulnerable Populations and Health Disparities.

an eye to what is on the horizon. The date of the symposium is significant, occurring in the month that the HGP was announced 10 years ago and coinciding with the date 60 years ago when James Watson and Francis Crick's article describing DNA's double-helical structure was published. This year's symposium is timed with both historic achievements in mind.

National DNA Day Student Observation

Select area high school students will learn about a number of prominent areas of genomics during a day spent with NHGRI experts and staff of the Smithsonian National Museum of Natural History. The National DNA Day event, planned for Apr. 19, will include museum tours, hands-on activities, a scavenger hunt and an IMAX film.

"We are planning activities for DNA Day that will instill in these teens a sense of wonder and interest in the field of genomics," said Dr. Carla Easter, deputy director of NHGRI's Education and Community Involvement Branch.

Interactive Exhibition

In mid-June, the National Museum of Natural History in collaboration with NHGRI will unveil a high-tech, high-intensity exhibition that celebrates the 10th anniversary the HGP's completion. The exhibition will be organized around several themes including the genome and you, the natural world and health and humanity. It will provide visitors with new ways to look at themselves as individuals, as members of a family and as a species that is part of the diversity of life on the planet.

Visitors will also discover how scientists use genomics to establish links between genes and specific diseases and traits as well as the latest advances in genomic medicine, prenatal testing and genomically guided drug therapy. The exhibition will attempt to dispel common misconceptions about genetics and genomics and challenge visitors to think more deeply about the complex ethical, legal, social and environmental issues raised by genomic advances.

"The completed sequence of the human genome gave us the first glimpse of the massive instruction book that orchestrates all the complexities of human biology," said Green. "We want to help the public see how the Human Genome Project has and will continue to expand our knowledge of the human body in health and disease and in the biodiversity of the natural world."

More information about these 10th anniversary celebrations, including the seminar series starting this month, can be found at www.genome.gov/HGP10. 



ADHD Genetics Study

Doctors at NIH are conducting a nationwide study to identify specific genes that contribute to attention deficit hyperactivity disorder (ADHD). Participating families must have at least two children, and at least one with ADHD (between the ages of 7 and 17). No travel is required for this study; all information will be collected over the telephone and through the mail. Participants will receive study-related tests at no cost. Call 1-800-411-1222 (TTY 1-866-411-1010). Your participation may help doctors develop a new treatment for ADHD.

Overweight Volunteers Needed

NICHD is looking for men and women ages 35-70 who are overweight and have abnormal glucose levels. After an initial screening visit for general health assessment, participants will undergo treatment with a cortisol-blocking medication (mifepristone) or a non-active pill (placebo) for 7 days. Each participant will take both study agents with a gap of 6 to 8 weeks between the two. Testing before and after treatment with the study medications will include blood drawing over 24 hours, urine collection, an oral and an intravenous glucose tolerance test and 1- to 2-day overnight inpatient stay. Compensation will be provided. For more information, call 1-800-411-1222 (TTY 1-866-411-1010) and refer to study 11-CH-0208.

Volunteers Needed for Energy Expenditure Study

The National Institute of Diabetes and Digestive and Kidney Diseases is conducting a study to learn more about the relationship between energy expenditure, brown fat, environmental temperature and body temperature. If you are a healthy African-American or Caucasian male, age 18-35, lean or obese, consider participating. All study-related tests are provided at no cost. Compensation will be provided. For more information call 1-800-411-1222 (TTY 1-866-411-1010). Se habla español. Refer to study 12-DK-0097.

Have a Family History of Alcohol Addiction?

The National Institute on Alcohol Abuse and Alcoholism is seeking men and women ages 21-30 with a family member (parent or sibling) with a history of alcohol addiction. The study seeks to identify genes that are related to the response to alcohol in humans (study 11-AA-0180). Volunteers should be healthy and drug-free. Qualified participants will be reimbursed for their participation. The study involves a screening visit and two outpatient visits at the Clinical Center. For more details and to participate, call (301) 435-9397 or email AlcPGstudy@mail.nih.gov.



SUMMIT

CONTINUED FROM PAGE 1

Above, from 1:
NIH director Dr. Francis Collins calls the summit a “signal moment” in the course to eliminate health disparities.

NIMHD director Dr. John Ruffin addresses summit participants.

U.S. surgeon general Dr. Regina Benjamin talks about bringing “joy” back into being healthy.

HHS assistant secretary for health Dr. Howard Koh says everyone should have access to the “highest attainable standard of health.”

Dr. Gail Wilensky, economist and senior fellow at Project HOPE, stresses that fixing the economy is key to reducing health disparities.

Below:
A portrait honoring former Rep. Louis Stokes is unveiled at the summit.

PHOTOS: ERNIE BRANSON

federal participation from 14 of the 15 executive departments—including all agencies of the Department of Health and Human Services—and more than 3,000 attendees. Led by the National Institute on Minority Health and Health Disparities, the summit attracted almost 2,000 abstract submissions, approximately 100 sessions and more than 800 scientific posters.

“We’ve been at this for far too long,” NIMHD director Dr. John Ruffin told the audience of scientists, health care practitioners, researchers, government leaders, policymakers, community leaders and students during opening remarks. “While we are making incremental progress, it is time to accelerate the pace. It is a daunting challenge, but it is surmountable if you take your role seriously and make your contribution to win this race.”

“We at NIH—aided and encouraged by countless champions, some of whom you see here on the stage—are acutely aware of the persistence of these disparities and you can point to various achievements that have moved us in the right direction,” said Collins. “And now, with the involvement of virtually every institute at

NIH, and with a strategic plan to guide us, and with the elevation of NCMHD to become a full-fledged institute, you can see that momentum is building. This summit is a signal moment in that whole course.”

The opening ceremony also paid homage to another champion in the race towards health equity—the late Sen. Arlen Specter. Former HHS secretary Dr. Louis Sullivan, Research!America President and CEO Mary Woolley and Collins dedicated the summit to Specter, who was known for his enthusiastic support of medical research and who received a lifetime achievement award at the 2008 summit.

Former surgeon general Dr. David Satcher discussed his global experience with the social determinants of health and posed the question, “What if we were equal?” He stressed that while health disparities have international impact, it is important to remember that change begins in local communities.

His remarks set the tone for plenary sessions on global health that highlighted strategies, policies and models from countries including



Brazil, South Africa, the U.S., Canada, Latin America and the Caribbean to combat social, economic and environmental factors that cause health disparities.

Assistant secretary for health Dr. Howard Koh said the audience should use its passion and perseverance to help ensure that every American has access to what the World Health Organization calls the “highest attainable standard of health.”

Surgeon general Dr. Regina Benjamin discussed the National Prevention Strategy led by her office, stressing that lifestyle changes are not sustainable if people are unhappy. While some people might enjoy running marathons, for others, the motivation is fitting into an old pair of jeans. “We have to make being healthy a joy,” she said, calling her new way of thinking a “journey to joy.”

Other plenary sessions emphasized the importance of building coalitions and thinking strategically about the business of health care to increase disease prevention. Dr. Gail Wilensky, economist and senior fellow at Project HOPE, proposed that the health care system should provide incentives to institutions and clinicians who provide high quality, efficient care and reduce disparities and reward those consumers who lead healthy lifestyles. She also stressed that fixing the economy was the key to reducing disparities.

The day ended with a spirited town hall meeting on building a healthier global society, moderated by Dr. Prerna Mona Khanna of Fox Chicago News.

As a testament to the summit’s theme of “Integrating Science, Practice and Policy,” policymakers addressed the crowd during the final plenary session. Citing a small nursing school in his district that has some of the highest graduation rates in the country, Rep. Elijah Cummings (D-MD) stressed that the students were so successful because they had grown up with relatives who had suffered from unequal health care.

“They took their pain, turned it into a passion and used it to fulfill their purpose,” he said, to thundering applause. 🗣️



In newly created posts, NHGRI director Dr. Eric Green (above) is acting associate director for data science and NIBIB director Dr. Roderic Pettigrew (l) is acting director for scientific workforce diversity.

Big Data, Diversity Initiatives Get Acting Directors

NHGRI director Dr. Eric Green and NIBIB director Dr. Roderic Pettigrew recently accepted acting roles in two new senior scientific positions created by NIH director Dr. Francis Collins as part of NIH’s response to advisory committee to the NIH director (ACD) working group recommendations on Big Data and the diversity of the scientific workforce. Collins also said the search is on for permanent hires for these posts.

Green will be acting associate director for data science (ADDS), leading an NIH-wide initiative to take better advantage of the exponential growth of biomedical research datasets.

“The era of ‘Big Data’ has arrived,” said Collins. “There is an urgent need and increased opportunity for increased collaboration and coordination of access to, and analysis of, the many different data types that make up this revolution in biological information, including genomics, imaging and phenotypic data from electronic health records.”

In his ADDS role, Green will lead the coordination of data management, communication and data interpretation for both the NIH community and the biomedical research community at large.

Pettigrew will be acting director for scientific workforce diversity, leading a new initiative to diversify the biomedical research workforce. The permanent position will be known as the chief officer for scientific workforce diversity.

“The area of workforce diversity and inclusion is critically important to the success of the NIH to achieve scientific outcomes that advance the nation’s health,” Collins said. “Recent analyses have shown that there is great need to appoint a nationally known scientist at the NIH to develop a comprehensive vision and strategy to diversify scientific applicant pools and pipelines, expand recruitment methods and retention strategies, guarantee the fairness of peer review and help promote inclusiveness and equity throughout the biomedical research community at large.”

Pettigrew will oversee NIH programs and activities designed to address the unique diversity and inclusion challenges of the biomedical research workforce and will serve as co-chair of both the working group on diversity of the ACD and the newly formed internal NIH steering committee on diversity.

FLU SHOTS

CONTINUED FROM PAGE 1

Right:

This year, media attention has been constant and the headlines are about how sick people are and how bad the flu is. As a result, many people who are normally reluctant to get the shot are asking for it, observes Dr. James Schmitt of OMS.

"Two factors have combined to increase the size of this year's program," explained Dr. James Schmitt, OMS director. "First, HHS Secretary Kathleen Sebelius ruled in 2011 that all HHS operating divisions should extend the offering to their contracted workers.

"The second driver has been the coverage of the ongoing influenza epidemic in the press. Last season, there was little media interest and few headlines about flu. It just wasn't a big deal. This year, the media attention has been constant and the headlines are about how sick people are and how bad the flu is. As a result, a lot of people who are normally reluctant to get the shot are asking for it this year."

According to the Centers for Disease Control and Prevention flu web site, "In comparison to other seasons, the 2011-2012 season set a new record for the lowest and shortest peak of influenza-like illness. The season began late and was mild compared to most previous seasons for which surveillance data is available." In contrast, the current season may not have reached its peak yet.

Despite yearly fluctuations in demand, Schmitt said the program's goals are always the same.

"Our focus—our priority without a doubt—is centered on the health and safety of NIH patients who come to the Clinical Center to participate in our studies," he explained. "From there, we circle outward to the health care workers who come in contact with those patients and then we get to the rest of us...This season, we immunized more than half the people who come to campus on a daily basis. That's pretty remarkable."

The Clinical Center mandates that all employees with patient contact are required to take the vaccine, or present documentation by their physician of a medical contraindication. About 93 percent of CC employees with patient contact take the vaccine.

Schmitt emphasized that the immunization program is a team effort, involving not only OMS and the Hospital Epidemiology Service, but also the Office of the ORS Director, which "helps us advertise the program" and the CC pharmacy, which purchases and manages vaccine dosages.

"The neatest part of this work," Schmitt said, "is that about a third of the people who got the shot not only responded to our electronic survey, but were also kind enough to write us comments. Every year we evaluate what we did well and what we should improve. Those comments—and we can now read them in real time—help us further improve the offering."

This season, more than 6,350 people—about 47 percent of those immunized—responded to the 4-ques-



tion survey, which was delivered via email probably before they rolled their sleeves back down.

"Of those responding to the survey, 87 percent reported that they received the vaccine within 5 minutes of arriving at the immunization clinic; 99 percent reported that they were pleased with the service they received...That's amazing," Schmitt noted.

Over the years, the most common compliment the program gets by far is about the short wait time for the shot. Consistent complaints, on the other hand, are registered by workers who are unfamiliar with the layout of the Clinical Research Center, where the majority of shots are administered.

"We need to get more and better signage to lead people to the shot clinic easier," Schmitt acknowledged. In addition, respondents suggest that NIH offer the vaccine at alternate times, including the noon hour and on weekends.

Noting that "complaints are probably the most useful comments we get," Schmitt said another criticism this season was the delay in providing enough vaccine doses for employees ages 65 and older. A large portion of the NIH workforce is in that age range. The program underestimated how many NIHers would elect to get the special highly concentrated vaccine targeted to seniors.

High-dose shots contain about 4 times as much antigen as standard shots, Schmitt said. "Those who get that shot are also more likely to have a sore arm later."

Although this season's vaccine is said to be a good match for this season's virus, and despite the high numbers of people getting the shot, many of them will still come down with the bug.

"About 40 percent of those who get vaccinated won't be protected," Schmitt pointed out. "[However] getting immunized reduces the likelihood of you getting the flu, and it may reduce the severity and duration [of the bout]."

As for other ways of avoiding the flu, Schmitt advised letting common sense prevail: "Stop shaking hands and try to wash your hands frequently throughout the day," he said. "Please stay home from work if you're sick. Don't come in and spread it to everyone else. Also, stay away from places where crowds gather, like supermarkets and clubs. Keep your distance from people you suspect are sick. If you see someone coughing or sneezing, try to avoid coming in contact with them."

For more general information about the flu, visit <http://www.flu.gov/#>. 📍

milestones

Nearly a Century of Research Combined, Two NIAID Infectious Disease Experts Retire

Drs. Robert Purcell and Albert Kapikian, world-renowned virologists in the NIAID Laboratory of Infectious Diseases (LID), have retired after remarkable careers at NIH.

Purcell, chief of LID's hepatitis viruses section, came to NIAID in 1963. He is perhaps best known for his contributions to the development of the first licensed vaccine for hepatitis A and to the creation of vaccines for hepatitis B and E.

Kapikian, chief of LID's epidemiology section, has worked at NIH for more than 50 years. Known as "the father of human gastroenteritis virus research," he and his colleagues were the first to identify norovirus, initially called Norwalk virus, as a cause of epidemic gastroenteritis. He also led a decades-long effort to develop the first licensed vaccine for rotavirus, the most common cause of severe childhood diarrhea worldwide.

"Bob and Al are two giants in the field of virology," said NIAID director Dr. Anthony Fauci. "Both not only have made seminal contributions to the understanding of viruses, they also have translated their discoveries into vaccines that are today preventing disease and saving lives."

While at NIAID, Purcell helped change the landscape of hepatitis research. In 1972, he and colleagues at the CDC developed the first hepatitis B animal model, a breakthrough that finally allowed researchers to observe the course of disease. The following year, he, Kapikian and Dr. Stephen Feinstone identified and characterized hepatitis A virus. In 1978, Purcell demonstrated that hepatitis non-A, non-B (now called hepatitis C) is transmissible by blood and can remain infectious within the body for a lifetime. Purcell's noteworthy discoveries continued in the early 1980s, when he and his collaborators discovered hepatitis D, and in the 1990s, when he and his colleagues identified the fifth strain of hepatitis, hepatitis E.

Purcell's research did not stop with characterizing hepatitis viruses. He helped develop the first licensed vaccine for hepatitis A and played a major role in developing a licensed vaccine for hepatitis B. He and his collaborators later demonstrated that vaccination against hepatitis B protects against hepatitis D. Purcell also has worked to develop a safe and effective vaccine for hepatitis E, which has not yet been licensed.



Dr. Robert Purcell (l) and Dr. Albert Kapikian (c) recently retired after nearly 100 years combined at NIH; in photo at right, Purcell (l) and Kapikian (c) are shown with Dr. Stephen Feinstone next to an electron microscope now on display in the lobby of Bldg. 50.

Purcell is a member of the National Academy of Sciences and has authored or co-authored more than 700 publications. He received the Gorgas Medal from the American Association of Military Surgeons for distinguished work in preventive medicine and the Squibb Award from the Infectious Diseases Society of America for excellence in the field of infectious diseases. He will continue to conduct research at NIH as a special volunteer.

"When colleagues leave NIH, I have a tradition of comparing them to a single baseball player," said Kapikian. "Bob reminds me most of Derek Jeter, the star short-stop of the New York Yankees, not only for his great talents and achievements, but also for his consistency, modesty and care for the welfare of the team—attributes of a real Hall of Famer."

Kapikian made several discoveries during his NIAID career that broke new ground in the study of gastroenteritis viruses. In 1974, while conducting studies in infants and young children hospitalized with diarrhea, Kapikian and his colleagues detected human rotavirus. This was the first reported detection in the U.S. of the virus, which had been discovered in Australia a year earlier.

Kapikian led a nearly 25-year effort to develop a rotavirus vaccine. He and his research group defined the mode of transmission of rotavirus, identified the viral proteins critical for triggering an immune response and formulated a vaccine aimed at protecting against several important rotavirus strains. Their efforts ultimately led to the development, testing and FDA approval in 1998 of the first rotavirus vaccine. Kapikian's work has led to second-generation rotavirus vaccines and ongoing efforts to improve rotavirus vaccines and expand their use in the developing world.

"Al's relentless good will, kindness and rigorous approach to science set a high bar," said Dr. Paul Offit, director of the Vaccine Education Center and chief of the division of infectious diseases at the Children's Hospital of Philadelphia. "He has been a touchstone for everyone working in the field, both in this country and across the globe. Without Al, the development of a rotavirus vaccine would have taken considerably longer."

Kapikian's accomplishments earned him the Albert B. Sabin Gold Medal, the Children's Vaccine Initiative Pasteur Award and the Maurice Hilleman/Merck Award, among many others. He will continue to work part-time at NIAID to help oversee the licensing activities of LID's rotavirus vaccine candidates.

"One of the joys of working in the LID for almost 50 years has been my association with Albert Kapikian," said Purcell of his colleague and friend. "Al has always been extremely generous with his time and expertise, and his love of good science is exceeded only by his love of baseball—specifically, the New York Yankees. Scientific discussions almost always include a baseball story."

NIGMS's Tompkins Retires to Embrace Life as an Artist

By Kirstie Saltsman

A colorful glass disk with an abstract design glows in the window of Dr. Laurie Tompkins' office. Tompkins, who retired from NIGMS in December 2012, said she made the piece on a cheerful spring day, and, as with all of her fused-glass artwork, she improvised as she went.

Another area she developed was genomics resources for studying model organisms. As a former fruit fly researcher, Tompkins understood the value of and need for comprehensive resources on model organisms. She spearheaded the trans-NIH fly initiative and oversaw several other trans-NIH and even trans-governmental efforts to establish and maintain model organism databases.

Tompkins is also credited with helping to create an entirely new program for funding innovative, potentially high-impact research that could transform a scientific field. The Exceptional, Unconventional Research Enabling Knowledge Acceleration (EUREKA) program grew jointly from her research experience and her artistic, avant-garde spirit.

As a former researcher, she said, "I understand the frustration of not being able to test wild and crazy ideas because of lack of funding to do them. I always challenged hypotheses when I did research. I like to test the limits, both as an artist and as a scientist."


In 2012, EUREKA was subsumed by the NIH-wide NIH Director's Transformative Research Award Program, supported by the Common Fund. Tompkins helped guide the program's expansion and served on its steering committee until her retirement.

In addition, she is highly lauded for her scientific, communication and organizational skills.

"I hear so many compliments about her from applicants and grantees, especially about the outstanding guidance she has provided to help them navigate NIGMS's and NIH's often-confusing programs and policies," said acting NIGMS director Dr. Judith Greenberg. "Her communication skills have been greatly appreciated by both the outside community and her colleagues at NIH."

What will Tompkins miss most about NIGMS? "The people," she said, without hesitating. She said her colleagues at NIGMS are the best people she's ever worked with.

"They give you a nudge when you need it, and they give you support when you need it," she said. "The people here make you do your best."

Tompkins looks forward to embracing life as an artist. She and her husband plan to move to their house in Hawaii, where the ocean views and resplendent garden will provide ample inspiration during the next phase of her life. 

Dr. Laurie Tompkins recently retired from NIGMS; she'll now concentrate full time on her career as an artist. Below, the glass sculpture "Anemone" she created.



The same spirit of spontaneity had a hand in bringing Tompkins to the institute 13 years ago. At a review meeting for NIGMS grants, Tompkins, who was then an NIH-funded biology professor at Temple University, told the scientific review officer that his job seemed interesting. To her surprise, he stepped away briefly and returned with the descrip-

tion for an NIGMS program director vacancy that seemed like a perfect fit. The only problem was the opportunity closed in 2 days.

Nevertheless, she applied, got the job and joined the NIGMS Division of Genetics and Developmental Biology in 1999. She rose to chief of the division's Genetic Mechanisms Branch in 2008 and acting director of the division in 2011.

Tompkins is an expert in genetics. She earned a Ph.D. from Princeton University in biology with a concentration on genetics and conducted postdoctoral research on neurogenetics at Brandeis University. Her Temple lab studies focused on the genetics of reproductive behavior in fruit flies, one of many model organisms that scientists use to study human biology. She used her knowledge in these areas to nurture and expand the portfolio of NIGMS-funded research related to the genetics of behavior, including the 24-hour "circadian" rhythms that help our bodies keep time.

"She took over a program that was very small, and over time built it into a very prominent program focused on circadian biology," said Dr. Marion Zatz, a close colleague of Tompkins' who also retired from NIGMS. "It flourished under her management."



digest

NIH Launches Collaborative Effort to Find Parkinson's Biomarkers

A new initiative aims to accelerate the search for biomarkers—changes in the body that can be used to predict, diagnose or monitor a disease—in Parkinson's disease, in part by improving collaboration among researchers and helping patients get involved in clinical studies.

A lack of biomarkers for Parkinson's has been a major challenge for developing better treatments. The Parkinson's Disease Biomarkers Program (PDBP) supports efforts to invent new technologies and analysis tools for biomarker discovery, to identify and validate biomarkers in patients and to share biomarker data and resources across the Parkinson's community. The program is being launched by NINDS.

Biomarkers can include changes in body chemistry or physiology, in genes and how they are regulated and even subtle changes in a person's behavior. For example, certain antibodies in the blood can be biomarkers for different types of infection. For Parkinson's, there are no proven biomarkers.

The range of potential biomarkers for Parkinson's is vast and there have been promising leads. Some researchers are investigating the use of non-invasive imaging to detect changes in brain function or biochemistry. Several studies have tentatively linked the disease with changes in proteins or other molecules in blood, urine or in the cerebrospinal fluid that bathes the brain and spinal cord. PDBP is an initiative to fund and coordinate multiple biomarker studies.

H1N1 Flu Shots Found Safe for Pregnant Women

Norwegian pregnant women who received a vaccine against the 2009 H1N1 influenza virus showed no increased risk of pregnancy loss, while pregnant women who experienced influenza during pregnancy had an increased risk of miscarriages and stillbirths, a study has found. The study suggests that influenza infection may increase the risk of fetal loss.

Scientists at NIEHS and the Norwegian Institute of Public Health (NIPH) published their findings online Jan. 17 in the *New England Jour-*

nal of Medicine. The research was conducted following the H1N1 influenza pandemic that took place between spring 2009 and fall 2010. Norwegian public health officials had urged pregnant women to be vaccinated. However, media reports of pregnancy losses after flu shots caused some expectant mothers to forgo vaccination.

First author Dr. Siri Haberg of NIPH and colleagues initiated the study to help address the question of vaccine safety by taking advantage of Norway's excellent registries and medical records system. NIEHS researcher and co-author Dr. Allen Wilcox said NIPH researchers combined data from obstetrical visits, birth records and vaccination registries to investigate whether the influenza vaccination posed a risk to pregnancy. The study found that influenza infection increased the risk of fetal loss by up to two-fold. Influenza vaccination did not increase the risk of loss. Instead, the results suggest that vaccination reduces the risk of fetal loss.

Study Documents that Some Children Lose Autism Diagnosis

Some children who are accurately diagnosed in early childhood with autism lose the symptoms and the diagnosis as they grow older, an NIH-supported study has confirmed. The research team made the finding by carefully documenting a prior diagnosis of autism in a small group of school-age children and young adults with no current symptoms of the disorder.

The report is the first of a series that will probe more deeply into the nature of the change in these children's status. Having been diagnosed at one time with an autism spectrum disorder, these young people now appear to be on par with typically developing peers. The study team is continuing to analyze data on changes in brain function in these children and whether they have subtle residual social deficits. The team is also reviewing records on the types of interventions the children received and to what extent they may have played a role in the transition.

"Although the diagnosis of autism is not usually lost over time, the findings suggest that there is a very wide range of possible outcomes," said NIMH director Dr. Thomas Insel. "For an individual child, the outcome may be knowable only with time and after some years of intervention. Subsequent reports from this study should tell us more about the nature of autism and the role of therapy and other factors in the long-term outcome for these children."

The study, led by Dr. Deborah Fein at the University of Connecticut, Storrs, recruited 34 optimal outcome children who had received a diagnosis of autism in early life and were now reportedly functioning no differently than their mainstream peers.—compiled by Carla Garnett



Norwegian pregnant women who received a vaccine against the 2009 H1N1 influenza virus showed no increased risk of pregnancy loss, while pregnant women who experienced influenza during pregnancy had an increased risk of miscarriages and stillbirths, a study has found.



At left, Jason Klima and Lauren Abell provide leadership for NIH Nerds in Harmony. At right, NIH Nerds in Harmony includes (front, from l) Abell, Megan Wang, Alex Title and Lexi Dias. At rear are (from l) Klima, Tony Dawson, Ian Murphy, Anthony Duong and Femke Lamers.

Singers Offer A Capella Tunes for Select Audiences

By Jan Ehrman

The Rolling Stones they are not. Nor are you likely to mistake their music for Aerosmith, the Black Eyed Peas or Andrea Bocelli. In fact, most of these young NIH scientist-singers might go so far as to admit they really aren't top line performers (at least when they joined up) and most have had no professional training.

"That is true, in fact most of our members actually received their 'training' singing in the shower," noted NIDDK's Lauren Abell, soloist, soprano and director of NIH Nerds in Harmony, an *a capella* ensemble consisting of 14 members. The group, made up primarily of post-baccalaureate researchers, volunteer their voices, poise and occasional wit to participate in a number of musical performances each year, geared primarily to youth or special interest groups, both within and outside of NIH.

Abell, whose scientific work investigates translational regulation and gene repression using bacteriophage T4 and *Bordetella pertussis*, says, "Our group is very tight-knit and everyone is there because they love to sing, so every rehearsal is a good time."

The harmonizing assemblage was the 2004 brainchild of four NIH postbacs who started singing under the name "IRTA pella" (a play on Intramural Research Training Award). Since then, the group has flourished through the leadership of many directors and members who come and go as their professions enable them.

While a penchant for song is a driving incentive, some members see additional benefits to belonging to the group. Observes Alexandra Title, a second-year postbac in the Laboratory of Clinical Genomics, NICHD: "Joining this group was really a great way to meet and inter-

act with other baccalaureates pursuing different fields of science." She says the group has performed for many audiences, including D.C. Autism Buddies, the French Embassy's *Fete de la Musique*, Bethesda residents at holiday time and for patients at the Children's Inn and in the wards as well as in the Clinical Center's atrium.

"What's best is that singing at NIH allows us the privilege of cheering up sick patients," adds Title. "It also provides us bench scientists with exposure to the patient side of NIH—something we rarely get to experience from the lab." Singing is also a great way to relax and clear your mind after a day in the lab, she said, "and who doesn't need that?"

Under the leadership of current musical director Jason Klima, an NHLBI fellow investigating mitochondrial genetics, the ensemble delivers a variety of tunes from different genres. While in past years the emphasis was on top 40 hits and pop, "today we focus more on alternative and disco-rock, soul and traditional songs from groups such as the Beatles, Katy Perry, the Drifters and even *The Lion King*." Their favorite songs, he added, include "For the Longest Time," by Billy Joel and Joe Dassin's "Les Champs Elysees."

What keeps the group together? By all accounts, it appears to be camaraderie. "Through rehearsals, performances, karaokes, retreats and get-togethers, we've become closer than colleagues," Klima said. "This makes it easier to pass the torch, so to speak, as we are completely self-organized."

Anyone interested in joining NIH Nerds in Harmony or learning more about the group can contact them at [nih.nerdsinharmony@gmail.com](mailto:.nih.nerdsinharmony@gmail.com). If you would like to hear them perform, you can listen to them practice at the chapel in Bldg. 10, 7th floor, Mondays and Wednesdays at 5:30 p.m. You can also follow their activities via several social media sites, including [Twitter@NerdsinHarmony](https://twitter.com/NerdsinHarmony), Facebook (Nerdy Harmonizer) and YouTube (NerdsinHarmony). 🎵

National Children's Study to Host Data Users Workshop, Feb. 13

Registration is open for the National Children's Study "Data Users Workshop," Wednesday, Feb. 13 at the Fishers Lane Conference Center.

The goal of the workshop is to provide some background on the data use policies and data lifecycles of the National Children's Study and garner input from interested research partners on how to proceed with data releases in a way that is aligned with other federal research efforts and data use policies. The workshop will feature panel discussions on data documentation, quality assurance/quality control processes, data use protocols and disclosure review. For more information, registration and the draft agenda visit www.cvent.com/d/kcq4mp.